



RESEARCH ARTICLE :

Effect of resource constraints on growth and yield of cowpea (*Vigna unguiculata* L. Walp)

■ YOGINI M. GAGARE, N.K. KALEGORE, S.S. PAWAR AND R.S. SHINDE

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SUMMARY : A field experiment was conducted during *Kharif* season of 2015 Experimental Farm of Agronomy section, College of Agriculture, Latur to study the effect of production factors or constraints and their combinations on growth and yield of cowpea var. Konkan Sadabahar. The results indicated that adoption of full package of practices (fertilizer + weeding + plant protection) was recorded highest values of growth and yield parameters viz. maximum plant height (26.45 cm), higher number of branches (4.80), more number of leaves (15.47), dry matter plant⁻¹(15.58 g) and maximum number of pod plant⁻¹(4.84) and pod yield plant⁻¹(5.84 g), highest seed yield (738 kg ha⁻¹) and maximum harvest index (23.85). As the constraints increased growth and yield characters get reduced. Among the various constraints (weeding + plant protection) was given lowest growth and yield attributes as compared to full package of practices viz., minimum plant height (10.74 cm), lower number of branches (1.80), less number of leaves (4.74), dry matter plant⁻¹(3.47 g) and minimum number of pod plant⁻¹(3.10) and pod yield plant⁻¹(2.78 g) lowest seed yield (136 kg ha⁻¹) and lowest harvest index (19.89) and found to be as a major resource constraints in cowpea production.

KEY WORDS:

Cowpea, Resource constraints

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Author for correspondence :

YOGINI M. GAGARE

Department of
Agronomy, College of
Agriculture (V.N.M.K.V.),
LATUR (M.S.) INDIA
Email:yoginigagare1054@
gmail.com

See end of the article for
authors' affiliations